

### **REMARKS**

Reconsideration of this application is respectfully requested. In response to the Office Action ("Action") mailed August 18, 2006 and the Office Communication mailed February 1, 2007, Applicants have amended claims 10, 14, 16, 20, 21, 23, and 24. Claims 1-24 are pending.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider and withdraw all outstanding rejections.

#### **I. Rejections under 35 U.S.C. § 101**

Pages 2-3 of the Action reject claims 10-24 under 35 U.S.C. § 101 as allegedly being directed toward non-statutory subject matter.

##### **A. Rejection of Claims 10-19**

The Action rejects claims 10, 14, and 16 alleging that the "last line of the claim indicates that the statements may be run to return the desired result set" for each of these claims. The Action further alleges that since "these claims do not positively require the result set to be produced, the claims may not produce a tangible result." Claims 10, 14, and 16 have been amended to positively recite "the populated syntax pattern comprises one or more query language statements ~~which may be run~~ runnable against one or more data sources to return the desired data result set." Thus, claims 10, 14, and 16 positively recite that the claimed query language statements are runnable against data sources, and produce the tangible result of a populated syntax pattern. Accordingly, Applicants respectfully request that the rejection of claims 10, 14, 16, and claims 11-13, 15, and 17-19 respectively dependent thereon, be withdrawn.

B. Rejection of claims 20, 23, and 24

The Action rejects claims 20, 23, and 24 alleging that these claims are non-statutory.

Applicants respectfully traverse these rejections.

The Action alleges “since the claims do not define the tangible medium as computer readable, the program cannot actually be read or executed by a computer, thus failing to produce a useful result as required in *State Street*” (emphasis in original). Applicants respectfully disagree.

Applicants note that during patent examination, the pending claims must be given their “broadest reasonable interpretation *consistent with the specification*” (emphasis added). In re Hyatt, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Claim 20 recites a “tangible medium having a *processor* readable program code embodied therein for generating one or more query language statements through an *automated computer-implemented* method” (emphasis added). As is well known, computers include processors. Claim 20 specifically recites the phrases “tangible medium having a *processor* readable program code embodied therein” and “computer-implemented.” Contrary to the assertions made in the action, the claimed query language statements clearly can be read and/or executed by a computer. The statement in the Action that “the program cannot actually be read or executed by a computer, thus failing to produce a useful result” is wholly inconsistent with the specification and the language of the claim. Nevertheless, claims 20, 23, and 24 have been amended to recite a “tangible medium having a ~~processor~~ computer readable program code embodied therein.”

The Action further alleges that claims 20, 23, and 24 are non-statutory since they “do not define the production of a result set, so the claims also fail to define the tangible result required by *State Street*.” Applicants respectfully disagree.

The Action's position is inconsistent with the legal principles of State Street Bank & Trust Co. v. Signature Financial Group Inc. 47 USPQ2d 1596 (Fed. Cir. 1998). The State Street Court found that the transformation of "data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces 'useful, concrete, and tangible result'" (emphasis added). Id. at 1601.

Similar to the transformation in State Street, claims 20, 23, and 24 set forth a practical application and produce a useful, concrete, and tangible result. Claims 20, 23, and 24 recite "code for causing the processor to populate the selected syntax pattern with the identified argument data set to assemble at least one query language statement to be run against a data source" (emphasis added). Hence, these claims recite performing the practical application of assembling a query language statement via a computer program code. The result of these claims is an assembled query language statement. An assembled query language statement is a useful, concrete, and tangible result because the assembled query language statement may be run against a data source. Hence, claims 20, 23, and 24 set forth a practical application and produce a useful, concrete, and tangible result and are thus in accordance with State Street.

The Action appears to indicate that because these claims include the phrase "*to be run*" (emphasis added), which implies that the assembled query language statements may be used in a future action that has not yet occurred, somehow makes these claims inconsistent with State Street because they claim that the assembled query language statements may be used in a future action. Applicants respectfully disagree.

State Street itself relied on the ability to use data at a future time as meeting the requirement of producing useful, concrete, and tangible result. Specifically, State Street found

that a final share price “momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades” (emphasis added) met the requirements of producing a useful, concrete, and tangible result. See *Id.* at 1601. Thus, the implication presented in the Action that claims may not produce a result that is useable in a subsequent action contradicts State Street, and hence is improper. Therefore, claims 20, 23, and 24 are consistent with State Street and comply with 35 U.S.C. § 101.

C. Rejection of claims 21 and 22

On page 3, the Action rejects claims 21 and 22. The Action states that:

Claim 21 is addressed to a method of generating a query language statement which is neither defined as being a program encoded on a computer readable media or defining the production of a result set. Accordingly, the claims do not define a tangible result as required in *State Street*.

Claim 21 has been amended to recite: “A method of generating a query language statement from computer code embodied on a computer readable media.” Claim 21 further recites “accessing the defined syntax pattern from the system to generate a query language statement.” For the reasons analogous to those discussed above in the response to the rejection of claims 20, 23, and 24, Applicants submit that this amendment in combination with the comments above overcomes the rejection to claims 21 and 22.

Accordingly, Applicants respectfully request that the rejections of claims 10-24 under 35 U.S.C. § 101 be withdrawn.

## II. Rejections under 35 U.S.C. § 102

On page 3, the Action incorporates the rejection from the Office Action of March 10, 2006 ("March 10 Action"). On pages 3-4, the March 10 Action rejects claims 1-24 under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,442,557 to Buteau et al. (hereinafter "Buteau"). Applicants respectfully traverse.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). When evaluating the scope of a claim, every element in the claim must be considered. A claim may not be dissected and evaluated as discrete elements in isolation. Instead, the claim as a whole must be considered. See, e.g., Diamond v. Diehr, 450 U.S. 175, 209 USPQ 1, 9 (1981).

### A. Response to the Rejection of Claim 1

Claim 1 recites:

A system for automated generation of one or more query language statements comprising:  
a syntax pattern selector module for *selecting*, in an automated process, *a syntax pattern* corresponding to a desired function provided to the syntax pattern selector module and a syntax standard for use in generating the one or more query language statements;  
a statement assembly module for *populating the syntax pattern* in an automated process with an argument data set associated with a *desired data set* provided to the statement assembly module as part of the process of generating the one or more query language statements; and  
whereby at least one query language statement is assembled to be run against a data source to *return the desired data set*.  
(Emphasis added.)

Applicants incorporate the remarks from the previous response filed June 12, 2006 and request that those remarks be considered along with the following comments.

For at least the following three reasons, Buteau does not anticipate claim 1.

First, after reviewing the arguments presented on page 4 of the current Action, Applicants respectfully request reconsideration of the rejection. Upon careful consideration of the remarks, it is clear that the Action is not considering claim 1 as a whole. In rejecting claim 1, the Action inconsistently construes a second instance of a claim element in a manner that is wholly inconsistent with how the Action previously construed a first instance of the *same* claim element. Specifically, the Action inconsistently and improperly construes the claim term “syntax pattern” to reject the claimed “syntax pattern selector module for *selecting . . . a syntax pattern*” (emphasis added) in combination with the claimed “statement assembly module for *populating the syntax pattern* in an automated process” (emphasis added) of claim 1.

To reject claim 1, the Action interprets the claimed “syntax pattern” in two different and inconsistent manners. First, the Action rejects the claimed “syntax pattern” as being equivalent to query “results” in Buteau. See Action, page 4, ll. 2-3, *stating* that a “query functions to retrieve results, the *results being the selected syntax pattern*” (emphasis added).

Contradictorily, to reject the claimed features of “a statement assembly module for *populating the syntax pattern* in an automated process” (emphasis added), the Action states that the “graphical interface is used to create and fill (i.e., populate) the various portions of the *query*” (emphasis added). See Action, page 4, rejecting the claimed “statement assembly module for *populating the syntax pattern* in an automated process.” Thus, the Action first construes the claimed “syntax pattern” as being query “results,” and then construes the claimed “syntax pattern” as being the “query.” It is clearly inconsistent to interpret the “syntax pattern” as being both a *query* and the *results of the same query*. Thus, it is apparent that the arguments presented in the current Action are dissecting and rejecting the claim elements in isolation and are not

interpreting claim 1 as a whole. The Action inconsistently and improperly construes two of the instances of the claim term “syntax pattern” in claim 1 in the rejection and hence the rejection under 35 U.S.C. § 102 is improper.

Second, the Action ignores the relationships recited in claim 1 to reject the claimed “desired data set.” To reject claim 1, the Action improperly interprets the claimed “syntax pattern” as being the same as the claimed “desired data set.” Specifically, the Action fails to consider the relationship between the claimed “statement assembly module for populating the *syntax pattern* in an automated process with an argument data set associated with *a desired data set* provided to the statement assembly module as part of the process of generating the one or more query language statements” (emphasis added) in combination with the claimed “at least one query language statement is assembled to be run against a data source to *return the desired data set*” (emphasis added), as recited in claim 1.

To reject the first instance of the claimed “desired data set,” the Action states that the “desired data set can be other attributes in the query, such as those defined in the ORDER BY command line, but the phrase ‘desired data set’ is so broad it could refer to any command in the query, any predicate in the query, or even the search result.” See Action, page 4. The Action further states that the “query language statement illustrated in Fig. 9 is run against relational data to return *query results*” (emphasis added). See Action, page 4. Thus, the Action is interpreting the “query results” as anticipating the claimed “desired data set.”

However, the above statements from the Action clearly demonstrate that the Action is not interpreting the claim as a whole. Following the analysis included in the Action, the Action improperly interprets the claimed “syntax pattern” as being the same as the claimed “desired data set.” In the remarks above copied from the Action, the Action states that the claimed “desired

data set” is anticipated by the query results of Buteau. See Action page 4, *stating* that the “query language statement illustrated in Fig. 9 is run against relational data to return *query results*” (emphasis added) rejects the claimed “at least one query language statement is assembled to be run against a data source to return *the desired data set*” (emphasis added). As discussed above, the Action also finds that the claimed “syntax pattern” is anticipated by the query “results” of Buteau. See Action, page 4. Hence, the Action finds that the query results of Buteau returned from querying “relational data” anticipate *both* the claimed “desired data set” and the claimed “syntax pattern.”

This analysis from the Action clearly indicates that claim 1 is not being interpreted as a whole since the relationships specified in claim 1 would preclude such a rejection under 35 U.S.C. § 102. Specifically, the query results of Buteau returned from querying “relational data,” as alleged in the Action, cannot anticipate both the claimed “desired data set” and the claimed “syntax pattern.” Claim 1 recites that the “a syntax pattern selector module for *selecting . . . a syntax pattern* corresponding to a desired function provided to the syntax pattern selector module and a syntax standard for use in *generating the one or more query language statements*” (emphasis added). Claim 1 further recites that “at least one query language statement is assembled to be run against a data source to *return the desired data set.*” Thus, a selection of a syntax pattern may be used to generate one or more query language statements, and at least one query language statement is assembled to return the desired data set. Thus, the desired data set is returned based on the query language statement, which is based on a selection of the syntax pattern. Hence, the claimed “syntax pattern” is not the same as the claimed “desired data set.”

In spite of the clear differences between the claimed “desired data set” and the claimed “syntax pattern” specified in the claim, the Action rejects both the claimed “desired data set” and



the claimed “syntax pattern” based on query “results” of Buteau. See Action, page 4. Hence, the Action inconsistently and improperly applies the disclosure of Buteau in a manner that disregards the relationships specified in the claim.

Third, the Action inconsistently interprets the claimed “desired data set” to reject claim 1 over Buteau. The Action states that the “desired data set can be other attributes *in the query*, . . . or even the *search result* (emphasis added). See Action, page 4. The Action further states that the “query language statement illustrated in Fig. 9 is run against relational data to return *query results*” (emphasis added) as rejecting the claimed “at least one query language statement is assembled to be run against a data source to return *the desired data set*” (emphasis added). See Action, page 4. Based on this analysis, the Action is construing the claimed “desired data set” as being both the query and a search result from running the query. See Action, page 4. Thus, the Action construes a second instance of the claimed “desired data set” inconsistently with how the Action previously construed the first instance of the claimed “desired data set.” Clearly, the Action is not interpreting the claim as a whole and the rejection under 35 U.S.C. § 102(e) is improper.

In summary, the Action has inconsistently construed different instances of claim elements in a manner which is inconsistent with how the Action first interpreted these claim elements, and has ignored the relationships specified to support a rejection of claim 1. For this reason, the rejection of claim 1 under 35 U.S.C. § 102 is improper because the Action is not interpreting claim 1 as a whole. Specifically, the Action has not established that Buteau discloses “a syntax pattern selector module for *selecting . . . a syntax pattern*” (emphasis added) in combination with a “statement assembly module for populating the *syntax pattern* in an automated process” (emphasis added), as recited in claim 1. Further, the Action has not established that Buteau

discloses a claimed “statement assembly module for populating the *syntax pattern* in an automated process with an argument data set *associated with a desired data set* provided to the statement assembly module as part of the process of generating the one or more query language statements” (emphasis added) in combination with “at least one query language statement is assembled to be run against a data source to *return the desired data set*” (emphasis added), as recited in claim 1. Therefore, the rejection of claim 1 is improper 35 U.S.C. § 102(e) and Applicants respectfully request that the rejection be withdrawn.

Accordingly, claim 1 is in condition for allowance. Claims 2-20 and 23-24 also are in condition for allowance for reasons analogous to those given in support of claim 1. Thus, claims 1-20 and 23-24 are in condition for allowance and allowance thereof is respectfully requested.

B. Rejection of Claims 21 and 22

Claim 21 is set forth above. For at least the following reasons, Applicants submit that Buteau does not anticipate claim 21.

Buteau does not disclose “wherein the system does not need to be recompiled as a result of defining the syntax pattern,” as recited in claim 21. On page 4, the March 10 Action groups claims 1, 4-6, 10, 14, 16, and 20-24 together in the anticipatory rejection. Claim 21 is the only claim that recites the above identified claim features of a system not needing to be recompiled as a result of defining a syntax pattern. However, the March 10 Action does not identify any portion of Buteau that discloses these claim features and does not appear to address these claim features. In fact, a keyword search of Buteau revealed that Buteau does not use the word “compile” anywhere. Applicants submit that Buteau does not disclose “wherein the system does not need to be recompiled as a result of defining the syntax pattern,” as recited in claim 21.

Thus, Buteau does not anticipate claim 21 under 35 U.S.C. § 102. Applicants respectfully request that the rejection of claim 21, and claim 22 that depends thereon, be withdrawn.

Thus, all of claims 1-24 are in condition for allowance and allowance thereof is respectfully requested.

Applicants appreciate that claims must be given their “broadest reasonable interpretation consistent with the specification” during patent examination. In re Hyatt, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). The analysis provided in the current Action, however, is not simply a broader view of the claimed invention. Rather, the Action inconsistently applies Buteau to reject the claim elements without giving appropriate weight to the relationships between the claim elements specified in the claim and also does not consistently construe claim elements.

Applicants are earnestly attempting to compactly prosecute this Application. However, this application was filed on June 19, 2001 and has been pending for over five years. During this time, the Office has provided four non-final Office Actions, the first of which being issued on March 25, 2004, from two different Examiners. Not a single final rejection has been issued.

Should the Office decide to maintain this rejection, Applicants respectfully request that the next Office Action include a table having a first column reciting each claim element and a second column citing the reference, keeping in mind the relationships recited in the claim to give full effect to the relationships between the claim elements specified in the claims and to consistently construe claim terms.

**CONCLUSION**

In view of the foregoing amendments and remarks, it is respectfully submitted that this application is in condition for allowance. If the Examiner believes that prosecution and allowance of the application will be expedited through an interview, whether personal or telephonic, the Examiner is invited to telephone the undersigned with any suggestions leading to the favorable disposition of the application.

It is believed that no additional fees are due for filing this Response. However, the Director is hereby authorized to treat any current or future reply, requiring a petition for an extension of time for its timely submission as incorporating a petition for extension of time for the appropriate length of time. Applicants also authorize the Director to charge all required fees, fees under 37 C.F.R. §1.17, or all required extension of time fees, to the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,

HUNTON & WILLIAMS LLP



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